ACTA MECHANICA SOLIDA SINICA LIST OF CONTENTS, 1988

Fundamental properties of elasto-plastic matrix and existence and uniqueness of elasto-plastic stress and displacement ..... YAN-MING CEN 1

Optimal control of structures governed by variational and hemivariational inequalities and applications ..... P. D. PANAGIOTOPOULOS and C. D. BISBOS 15

On the convergence of the solution by initial stress method for non-associated plastic problems ..... SU-JIAN HUANG 33

Transient response of single-diskrotor on anisotropic supports passing through critical speed ..... ZHI-CHU FANG and ZHEN-HUANG LUO 39

A study of fatigue crack growth under random stresses in the aspect of statistics ..... JUN-MING HU. WEI-PING YAO and KANG-XIAN LI 51

Natural mode analysis of blades-disk coupled systems-modal synthesis of symmetric structure with C_N group ..... WEN-LIANG WANG, JIN ZHANG and XIANG-JUN CHEN 61

Study of half-space elastic contact problems by caustics ..... KUN-LIANG CHU and JIAN-CHU YAO 73

The scattering of SH waves by numerous inhomogeneities in an anisotropic body ..... WEI-FANG ZHONG and GUO-HUA NIE 81

On engineering approach to some fluid-structure interaction problems of vibration — a review ..... QING-HUA DU. YOU-SHENG WU and ZHEN-XING FENG 97

Two plastic buckling problems of cylindrical shell under impulsive loading ..... CHONG QING RU and REN WANG 111

Thermodynamic theories of stability postulate in plasticity ..... SU-JIAN HUANG 117

Coupled rocking and sliding vibration response of a structure to harmonic horizontal ground motion ..... XIN-CHUAN ZENG and A. S. CAKMAK 125

Propagation crack problems in interfaces between dissimilar orthotropic media ..... JIN CHENG 139

The criterion of critical void growth ratio and its applications ..... CHANG-QING ZHENG, LI ZHOU and JIAN-MING LIU 149

Boundary element analysis for dynamic response of vibration foundation ..... XI-RENG ZHOU and N. R. WIBERG 159

On the analyses of vibration and stability for orthotropic circular cylindrical shells conveying fluid ..... YU-YING HUANG and LI ZHAO 169

Influences of random disturbances on simultaneous resonances of nonlinear coupling

systems ..... DE-CHENG DAI and W. G. PRICE 181
An improved time domain polyreference method for modal identification
..... LING-MI ZHANG, YING-XIAN YAO and MING-FU LU 197
A convergent method of solution for clamped rectangular plate
..... YONG-GANG HUANG 215
Minimum principles in the linear dynamic theory of viscoelasticity
..... JIA-REN LI and SHEN-XUE ZHANG 223
The finite element method of viscoelastic large deformation plane problem with Kirchhoff stress tensors-Green strain tensors constitutive relation
..... YA-PENG SHEN. YI-HENG CHEN and YA-FEI PEN 235
The scattered energy around a circular hole by SH wave in anisotropic media
..... DIAN-KUI LIU and YING-CHUN YUAN 249
Stochastic finite element method based on local averages of random fields
..... WEI-QIU ZHU and YONG-JIAN REN 261
Scattering of elastic waves by a periodic array of cracks in 3-D space
..... ZAI-LIANG LI and QI-MIAO WANG 273
Generalized variational principles for linear elastic materials with voids
..... LI-HUA JIN 291
Experimental investigation of circular cantilever beams subjected to impulsive loading
... TIE-GUANG ZHANG. LONG-MAO ZHAO. CHENG LIANG and TONG-XI YU 301
An experimental analysis of displacement field of mixed mode crack
..... WEI XIAO and LIN-AN LEE 315
Some further results of the boundary element method for plate bending
..... XI-LIN LU and QING-HUA DU 325
Finite element analysis of mode III steady crack growth in anisotropic hardening materials
..... MU SUN and SHOU-WEN YU 337
Boundary element method for moderately thick shallow spherical shell bending
..... XIAO-YAN LEI and MAO-KUANG HUANG 345
Semi-infinite mode III crack propagation at constant velocity in anisotropic medium
..... DIAN-KUI LUI and ZAI-LIANG LI 355
Nonlinear stability of large K-value shallow spherical shells with a symmetrically distributed line load ..... SHU-XIAN GU 369
The axisymmetrical elastic field of an ellipsoidal inclusion with a slipping interface
..... ZI-KUN WANG and JIN-XING HUANG 383
The angle-interlaminar shear strengtn of carbon fiber-reinforced plastic laminates
..... SHUN-LIN LI and JUN XIAO 395

A method of the small plastic deformation analyzing the circular cantilever beam impact problem····· TIE-GUANG ZHANG and TONG-XI YU 401
Quasi-Euler-Poinsot motion of a rigid body····· YAN-ZHU LIU 407
Asymptotic integration of elasto-plastic constitutive relation for isotropic hardening material and its computational precision
····· XU-CHENG WANG and LIANG-MING C. 419
The stagnation laws of inclined cracks at original turning point under fatigue tensile loading····· W. Z. XING, Q. Q. HUANG and M. Z. HU 431
Theory of slip-line field for anisotropic hardening materials
····· AN CHEN, ZEN-XIN MI and XI-MENG YAO 439
Flaw detection of an elastic pole—an application of optimal control theory
····· GUANG-YUAN HUANG and YUAN-HUA TANG 447
A study of the dynamic holophotoelasticity light ratation method
····· YU-WEN QIN, CHANG-FAI DU and ZHI-SHENG YE 461